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ABSTRACT

This examination of the associate degree and its role within community college education in the United States begins with a historical perspective on the evolution of the associate degree since the beginning of the 20th century. Chapter II reviews the literature concerning the diversity of the associate degree and the ways in which it is perceived and evaluated and stresses the need for general education as an important aspect of degree requirements. Chapter III presents responses from representatives of community colleges, high schools, universities, professional associations and the business community to a survey on the status of the associate degree, revealing a perceived need for change in such areas as the structure of the degree, coursework, general education requirements, specific competencies, computer courses, articulated programs, and better qualified high technology teachers. Chapter IV provides viewpoints from state higher education officers, representatives of educational associations, professors of higher education, principals, counselors, faculty, and administrators regarding the function and operation of the associate degree. Finally, chapter V raises issues drawn from a report by the Task Force for the Redefinition of the Associate Degree. Appendices list task force members and survey respondents. (HB)

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REDEFINING THE ASSOCIATE DEGREE

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PREFACE

The American community college is becoming one of the most successful educational institutions in the world. Many developing countries have already adopted models of community and/or technical colleges and have created hundreds of institutions to usher in a new age of civilization.

In the United States the community college is a growing educational enterprise. In the 1982–83 academic year close to five million students chose to attend 1,219 community, technical, and junior colleges to begin, to complete, or to continue their quest for learning. Community colleges thrive because they have a long-term commitment to open access for all citizens who can benefit from attending, coupled with dedication to sustaining and improving the quality of the educational experiences they provide. Community colleges are eager to respond to the needs of a growing student population, and as one of their missions, they award associate degrees at the completion of designated two-year curricula.

During the last decade the number of associate degrees awarded increased by approximately 60 percent, compared with an increase of 11 percent for the baccalaureate degree. In fact, associate degrees, which accounted for more than 18 percent of all degrees in 1970, grew to 23 percent at the end of the decade.[1] The community colleges are proud of this achievement. However, there is a growing desire to initiate a national dialogue on the goals, definitions, and quality of this degree.

Dale Parnell, president of the American Association of Community and Junior Colleges, appropriately recognized the need for determining the present status of the associate degree, and the National Endowment for the Humanities made it possible to plan for such discussion. In these days of austere budgets, collective bargaining, and retrenchment, a review of the associate degree requires exceptional perception, a deep commitment to quality, as well as an understanding of society's needs.

This presentation is the result of a fundamental process of inquiry that began with the review of literature pertaining to the history, trends, and meaning of the associate degree. As a second step, a survey instrument was sent to 100 community, technical, and junior college districts with a total enrollment of approximately two million students. A different questionnaire was sent to 100 high schools and 50 companies randomly selected from the Fortune 500 listings, including automobile manufacturers, oil companies, and other major industrial concerns. In addition to these surveys, 20 academic and professional associations and 10 university professors in the field of community college education were invited to comment on the subject. Also, a special effort was made to contact the state higher education officers across the country. The responses were compiled and analyzed; opinions and essays were placed into appropriate categories; and after further review, recommendations were presented for further discussion.

The most valuable aspect of this initial presentation is the formation of the National Task Force on the Redefinition of the Associate Degree. The Task Force is composed of some of the foremost education leaders and experts in the country, including a high-ranking official of the present administration, public and private university presidents, leaders of national accrediting and testing agencies, chief executive officers of community and technical colleges, a superintendent of a large, urban public school system, and professors of higher education.

I

Up to Now

A Historical Perspective

Any understanding of the associate degree as it now exists must be grounded in an awareness of its evolution throughout this century.

The birth of the associate degree and, indirectly, the two-year college can be traced to the University of Chicago, which in 1900 began awarding associate degrees in arts, literature, and science at the end of the sophomore year. The university's president, William Rainey Harper, fostered the foundation of Joliet Junior College in Illinois to serve as a feeder institution to the University of Chicago. Joliet Junior College was characterized as an institution ideal for technical and paraprofessional training and as a "junior college" with the added advantage of easy proximity and lower cost to the student.[2]

By 1918 there were 17 junior colleges in the country granting the associate degree. The junior college was "an institution offering two years of instruction of strictly collegiate grade," declared the newly founded American Association of Junior Colleges.[3]

A review of literature suggests that at nearly every organizational meeting held by the American Association of Junior Colleges during the 1920s and 1930s, the subject of occupational education was discussed, with the Association "aware that it had to take a leadership role in directing the movement for terminal education," as it was then called.[4]

In 1939 the Association created a commission on junior college terminal education to study the role of nonacademic or vocational programs, which at that time accounted for about one third of the courses offered at the approximately 200 junior colleges then in existence. In 1944 the National Education Association's Commission on Educational Policies stressed the need for a one- or two-year program of occupational education.[5]

The end of World War II brought a shift in focus as young men rushed back to the campuses eager to prepare for participation in the good life. The GI Bill was instrumental in opening a new era of two-year college education.

And in 1947 the President's Commission on Higher Education "recommended an increase in the number of community colleges so that students who might not benefit from a full four-year course of studies could attain an education enabling them to take their place in the American workforce."[6] The Commission spoke specifically of programs enabling graduates to enter skilled, semiprofessional, and technical jobs.

As John Lombardi pointed out, it all began with the post-World War II era, which "marked the beginning of the second major growth period for the junior colleges. And along with other aspects the associate degree became one of its important characteristics."[7] By the late 1950s the degree was accepted and authorized as verification of genuine academic achievement in nearly every state. Proliferation of various types of degrees followed, with associate in arts, associate in science, and associate in applied science tallying the largest total of awardees.

Since the 1950s each decade has found two-year colleges responding to different societal needs. First, there was the call to help this country respond to the Sputnik challenge, with math and science being stressed in the curriculum. The 1960s saw emphasis on expanded educational opportunities to serve those who had previously been neglected by higher education, while the 1970s brought compensatory and vocational education into the forefront as the colleges responded to greater disparity in students' ability and their increased preoccupation with preparing for a career. During those years the colleges underwent rapid expansion with enrollment increases of up to 15 percent a year.

This phenomenal growth was largely due to the fact that "of all higher education institutions, the community colleges contributed most to opening the system" and "were available to all comers, attracting the 'new students,' the minorities, the women, the people who had done poorly in high school, those who would otherwise never have considered further education."[8] And the influx of these "new students" affected the colleges in terms of curriculum and delivery systems. Since many were academically underprepared, compensatory education came into the spotlight, with nearly 60 percent of

all public two-year colleges found to have compensatory programs in a 1973 study and one third of the community college mathematics courses taught at a level lower than beginning algebra by the mid-1970s.[9]

There was also an impact on how, when, and where education was offered, with courses available in the evening, at outreach centers, and even on television. For example, part-time students went from 53 percent of total enrollment in 1963 to 62 percent in 1980. Another dramatic shift was found in the ratio of freshmen to sophomore enrollment. While a fairly consistent ratio of 2.4 freshmen to one sophomore was evident from the early 1950s to the mid-1970s, the proportion of students completing two years was less than one in five by the end of the 1970s.[10] Financial aid programs expanded rapidly as well, with student assistance programs found in 12 states in 1964, 22 in 1970, and in all but a few states by the beginning of this decade.[11]

Focusing in on trends in associate degree awards during the 1970s, data from the National Center for Education Statistics reflect a changing society and a changing community college. Numbers of degrees awarded in vocational areas showed substantial increases with nearly a 78 percent increase among mechanical/engineering technologies and an 184 percent jump for health services and paramedical technologies. Degrees in science and engineering-related programs increased 23 to 32 percent. Arts, sciences, and general education programs did not fare as well, however. While these categories accounted for about 57 percent of the total number of associate degrees awarded in 1970–71, they had dropped to just 37.5 percent by 1979–80.[12]

Demographic changes were evident as well. Since 1976–77 women have been receiving more associate degrees than have men, even though men still outnumber women in every other degree category. Women scored an increase of 102 percent during the 1970s in the number of associate degrees earned, according to the National Center for Education Statistics. Reflecting the increased interest among all segments for vocational training, the percentage of associate degrees awarded to women in career areas went from about 43 percent to 55 percent. For example, women earned about 40 percent of science and engineering-related associate degrees in 1970–71 and 52.4 percent by 1979–80.[13]

Data from the National Center for Educational Statistics indicate trends by ethnic group. For example, the 1970s also saw as many as 16 percent of associate degrees being awarded to minorities, compared with about 12 percent of baccalaureate degrees. Associate degrees in business and commerce technologies were the most common. In 1979–80 nonwhites accounted for 18.5 percent of degrees in business and commerce technologies and 20 percent of those received in data processing and public service-related technologies.[14] And now, for many community colleges in the 1980s, career education continues to be their major function.[15]

The 97th Congress in 1982 approved Public Law 97-300, the Job Training Partnership Act, which again put the emphasis on community colleges in joint federal-business-educational programs. This legislation "signals a new era for vocational education and the private sector to collaborate in providing job training and related services. Its focus is on enabling economically disadvantaged individuals and others in special need of training to begin employment," according to *VocEd*.[16]

This legislation reflects a new federal policy that to community and technical colleges is reminiscent of the era of the 1958 National Defense Education Act and its impact on strengthening humanities and sciences in higher education. At that time it was a reaction to the potential of Russian advancement in science. This time it is a reaction to, among other things, the Japanese factor in the traditional American marketplace, suggesting that this country cannot survive without a cohesive national plan including new emphasis on teaching of high technology in colleges. In this light the associate degree continues to be a significant contribution to the nation's economy and security.

II

Strength Through Diversity

A Review of Literature

Community colleges, as local institutions, have always highlighted diversity in programs, facilities, students, and objectives. An examination of the literature concerning the diversity of the associate degree, its components, and the ways in which it is perceived and evaluated, is essential to an understanding of the degree as it now exists, as well as to the formulation of recommendations for its redefinition.

According to a report conducted by the American Council on Education on the study of credentialing educational accomplishment, never has the certification function of institutions of higher education been more important than it is today: "A mobile, complex society supported by a technological economy is, by its nature, dependent on formal certification to identify the qualified, to protect against the incompetent and the fraudulent, and to encourage learning and competence."[17] The report points out that in an increasing number of career specialties it is difficult to measure quickly and confidently the difference between the competent and incompetent when evaluating job applicants. Degrees, in this situation, serve as proxies for human merit or as presorters of attainment.[18]

At the heart of discussion of any degree is an analysis of the curricula upon which attainment of that degree is based, and central to the debate about redefinition of the associate degree is the issue of general and liberal education, especially in terms of their role in the instruction of career-minded students.

Joseph Duffey, former chairman of the National Endowment for the Humanities, also addressed this issue, particularly in terms of two-year college programs, saying, "The humanities are not the sacred province of a select few. They are, instead, the intellectual and spiritual resources by which a society as a whole perceives and gives shape to its cultural life and legacy. No set of institutions is better placed, literally, than our community colleges, to ensure public access to these resources—resources that are the rightful heritage of all our citizens."[19]

It was William J. Bennett, chairman of the National Endowment for the Humanities, who in November 1982 sounded a warning when he told the National Council of Teachers of English that humanities courses in colleges and schools had degenerated into a "jumble of indiscriminate offerings" with "no rationale and no guidance or coherence for the mind or imagination." He said that "the activities undertaken in the name of the humanities don't seem to add up to anything; they don't define anything. The studies we associate with the humanities today no longer stand for a unified set of principles or a coherent body of knowledge." Instead, they have become "frighteningly fragmented, even shattered."[20]

Speaking to the issue of the humanities in occupational curricula was Arthur Cohen, professor of education at the University of California, Los Angeles, and president of the Center for the Study of Community Colleges, who wrote, "The humanities should be available to students in occupational programs through other than traditional course formats. It is not productive for humanities instructors to attempt to make their courses required for students in occupational programs. There is too much resistance on the part of the faculty of the occupational programs, their students, and community advisory boards. The humanities faculty must create modules, short segments that can be inserted into the occupational programs themselves. These segments can deal with aspects of the humanities that have meaning for students in those programs.... More needs to be done with literature, history and other disciplines in developing short segments of interest to students in automotive, electronic and engineering technology programs."[21]

There are many, however, who are not optimistic about reform and change, including Professor James O. Hammons of the University of Arkansas, who noted, "General education, like progress, is generally viewed with favor, but its predecessor, change, is viewed with fear and suspicion. In order for change to occur, the dead weight of inertia must be overcome.... General education will need to be defined and sold, its content and goals determined.... In addition, faculty will have

to be trained; student support enlisted; curriculum changes approved; materials of instruction developed or purchased; organizational structures reexamined; compromises worked out on numbers of hours to be devoted; articulation agreements with four-year colleges developed; and so forth." While the task is not easy, he said, "It must be undertaken if the community college is to prepare its students with the education they need for survival today. Earlier in its history, the community college had an opportunity and missed it.... For the community college 'next time' has arrived."[22]

Even though employees are dealing with more and more sophisticated technology in the workplace, the literature suggests that the generic vocational abilities of reading, writing, computing, and communicating are prized by business and industry above the more specific job-related skills. Charles Bowen, IBM's program director for educational development, was clear about what his company was looking for in prospective employees. "The main thing we want is the ability to understand and solve problems," he said. "And I suspect that involves a broader interdisciplinary education of the people we hire."[23]

This response is by no means unique. In a study quoted in *VocEd* it was emphasized that the business community needed, "above all, workers who can read, write, compute, and think...that they can get the job done only with employees who get to work on time, cooperate with others, take responsibility, and can adapt to change."[24] Lusterman's 1977 study of large firms indicated that employers wanted entry-level workers who are trainable and literate.[25]

The opinions expressed in this chapter stress the need for general education as an important part of the associate degree requirement. In that context, the humanities require more attention and structure. Just what direction American community colleges should take is still subject to debate. The very existence of the degree is a result of the early twentieth-century educational reform that allowed students to move at the end of a two-year curriculum in a variety of directions.

III

A Degree of Success

A Survey of the Associate Degree

Presently, there is growing public interest in the quality and the variety of academic and professional degrees awarded in higher education. Individuals, associations, government agencies, foundations, as well as business and labor groups are studying the substance and relevance of "higher learning in the nation's service." Ernest Boyer and Fred Hechinger point out that "America's colleges and universities seem today to be waiting for new cues from offstage prompters rather than setting their own objectives."[26]

The responses in this study are helpful as a self-analysis regarding the status of the associate degree as visualized by community colleges, high schools, universities, professional associations, and by the business community. Out of 100 college districts in 26 states, 72 responded to the inquiry form. These districts represent a student population of 1,561,497 and a mean enrollment of 7,769 in 201 colleges. Twenty-nine high schools in 26 states with a total enrollment of 38,557 and a mean enrollment of 1,430 participated in this sample survey. A relatively small percentage of polled companies responded to the inquiry—12 large corporations with a total number of 670,175 employees and a mean employment figure of 55,847.

In the analysis of the responses three statistical measures were used—frequency distribution, percentage, and mean. In the application of frequency distribution the number of responses under each single category is represented in a variety of tables. Percentage was utilized for the interpretation of different statistical computations and for the analysis of various tables. Mean, the most widely used measure of control tendency, was computed by adding up the total number of responses and dividing it by the number of respondents.

Of the sampled community colleges 74 percent operate in the traditional semester mode; 23 percent use the quarter system; 2 percent use a modified semester; and 1 percent is on a trimester calendar.

The percentages of responding colleges awarding various degrees were as follows: associate in arts, 97 percent; associate in science, 74 percent; associate in applied science, 45 percent; associate in general studies, 17 percent; associate in liberal arts, associate in arts and science, and associate in applied arts and science, all 4 percent. Offered by 2 percent of the colleges were associate degrees in occupational studies, engineering, computer science, secretarial administration, engineering technology, business administration, fine arts, applied arts, and applied business.

Table 1 shows a 7 percent drop in the number of associate in arts degrees awarded by the responding colleges between 1978 and 1980, and it is suspected that the progressive decline will continue. All other degrees show an increase in student demand.

Some of the reasons for the change in students' demand for the various associate degrees in Table 1 are found in responses received from Fortune 500 corporations. They report that the associate degree holders they hire are in technical fields.

There is a substantially higher percentage of four-year college and university graduates, as opposed to community college graduates, employed by these companies. Seventeen percent of the employers indicated they hire between 10 and 30 percent of the graduates; 25 percent hire between 20 and 30 percent; 8 percent hire between 40 and 50 percent; and 8 percent hire between 90 and 100 percent.

The supervisor of college recruitment of an automotive manufacturing company indicates that a bachelor's or master's degree is preferred for the professional positions in his company. Charles Adair, managing director of American Can Company, relates his firm's promotion percentage among employees without a degree, with an associate degree, and with a bachelor's degree. The promotion rate is 8.7 percent for those without degrees; 8 percent for those with associate degrees; and 14 percent for employees with bachelor's degrees. Promotion rates are highest for those with a bachelor's degree, and the lowest rate belongs to those with an associate degree.

The change in student demand requires a careful review of the various unit components of the associate degree. Of the total number of districts surveyed, 77

Table 1
Number of Degrees Granted From 1978–79 to 1980–81

Academic Year	Associate in Arts	Associate in Science	Associate in Applied Science	Associate in General Studies	Associate in Liberal Arts	Other*
1978–79	38,822	16,448	34,540	1,213	482	2,982
1980–81	35,891	17,556	37,557	1,590	530	3,052
Variance	−7.5	+7	+8	+24	+9	+2

*Other: Includes associate in business administration, associate in applied science, associate in applied business, and associate of occupational studies.

percent were in agreement with the present requirements, but 23 percent were not in agreement with the distribution of units and proposed changes that will be discussed under the pertinent section.

Table 2 represents the mean unit requirement in each area of seven different associate degrees among the respondent colleges.

It was one of the objectives of this study to look at the role of assessment in the associate degree program. Seventy-two percent of the responding districts have stipulated that their colleges provide entry-level assessment for the associate degree candidates, and 28 percent of the respondents report no entry assessment. A majority (60 percent) of the districts that provide student assessment indicate that the purpose of testing is to measure the need for remedial courses before the student begins the actual degree preparation. Seventy-one percent use the results to determine course eligibility, and 7 percent to determine personal and career counseling, advisement, and student placement purposes. Thirty-nine percent of the respondents indicate that they provide testing in basic skills and in the major study areas, and 61 percent offer no testing at all.

Thirteen percent of the respondents provide testing prior to basic skills courses; 14 percent during entry/orientation; and 8 percent at the end of the program. The question, "What type of special assistance does your institution provide for those seeking an associate degree?" resulted in the following responses: 91 percent of the respondents offer counseling to prospective associate degree candidates; 74 percent offer orientation; 36 percent offer academic advisement, developmental education, learning centers, special education, EOP&S, upward bound, tutoring, pregraduation check, transcript evaluation, faculty advisement, remediation; 23 percent offer individual tracking; and 6 percent do not offer special assistance to those seeking an associate degree. From the high schools responses indicate that they offer the following type of guidance concerning two-year colleges and associate degrees: 93 percent offer information regarding location of community or junior colleges; 79 percent furnish information regarding different programs; 76 percent offer information on the size of community or junior colleges; 66 percent provide information regarding type of instruction; 66 percent advise on degrees offered; 62 percent offer information regarding transfer of units; 62 percent communicate advantages over other institutions; and 21 percent provide information regarding cost and other general aspects of two-year colleges.

Another measure of quality in the associate degree program is the availability of honors courses in community colleges. Twenty-eight percent of the sampled college districts report offering honors courses, but the vast majority (72 percent) do not. Fifteen percent of the respondents consider that the basic difference between honors courses and standard courses is the degree of depth; 4 percent offer scholarship assistance; 1 percent, small classes; 6 percent, honors seminars; 4 percent, enriched courses; 7 percent, individualized options; and 9 percent, special assignments. More depth and special assignments are the most significant differences between honors courses and standard courses.

There are two questions related to high technology in the survey that require special attention. One relates to the possible impact of high-technology development on student demand for more programs, and the other is an attempt to find out what curriculum changes would satisfy this new demand.

To begin with, 71 percent of the institutions indicated that high technology had influenced their programs; 29 percent suggested no impact. In a growing number of four-year colleges and universities there is a requirement for degree candidates to interpret computer data and have experience in data processing. Yet, only 6 percent of the community college respondents indicated a course in data processing as a requirement of the associate degree.

Computer science is the area of the college curriculum most heavily impacted by high technology, followed by engineering technology, electronics, mathematics and physics, and finally, communications, word processing, and drafting.

According to the responding colleges, high technology has brought about a need for general curriculum review and consideration of collegewide planning changes. Among the changes already seen are the introduction of additional mathematics, physics, and computer

Table 2
Comparison of Mean Units Required for the Associate Degree

Area	Arts	Science	Applied Science	Arts/ Science	General Studies	Business Administration	Fine Arts
Major	21	24	32	27	33	18	24
Electives	19	18	10	6	13	9	2–14
Behavioral Science	4	4	4	3	6	—	—
Communication	5	5	6	8	5	6	6
Humanities	7	3	5	6	5	8	8
Natural Science	8	3	5	5	3	4	3
Physical Science	5	8	6	11	5	3	—
Social Science	7	5	6	5	6	15	6
P.E./Health	3	2	2	3	2	—	—
Total	79	72	76	74	78	63	61

science courses; establishment of campus computer centers; more frequent choice of computer science courses as electives; and consideration of computer literacy requirements. Colleges indicated a need for more computer science courses as well as additional data processing and high-technology equipment.

The most important question of the survey relates to measuring the need for change. Sixty-three percent of respondents said there should be changes in areas such as structure; coursework; general education; specific competencies; computer courses; improving articulation of degrees with similar bachelor degree programs; overspecialization in occupational degrees; and better qualified high-technology teachers. One percent of the respondents expressed the concept that radical changes during the '60s and '70s have not served the community well. Also expressed by this group was the view that associate degree programs were still the most effective way to offer skill training and upgrading. Thirty six percent replied that there was no need for change.

If there is a need for reform, what are the priorities that community colleges are interested in considering?

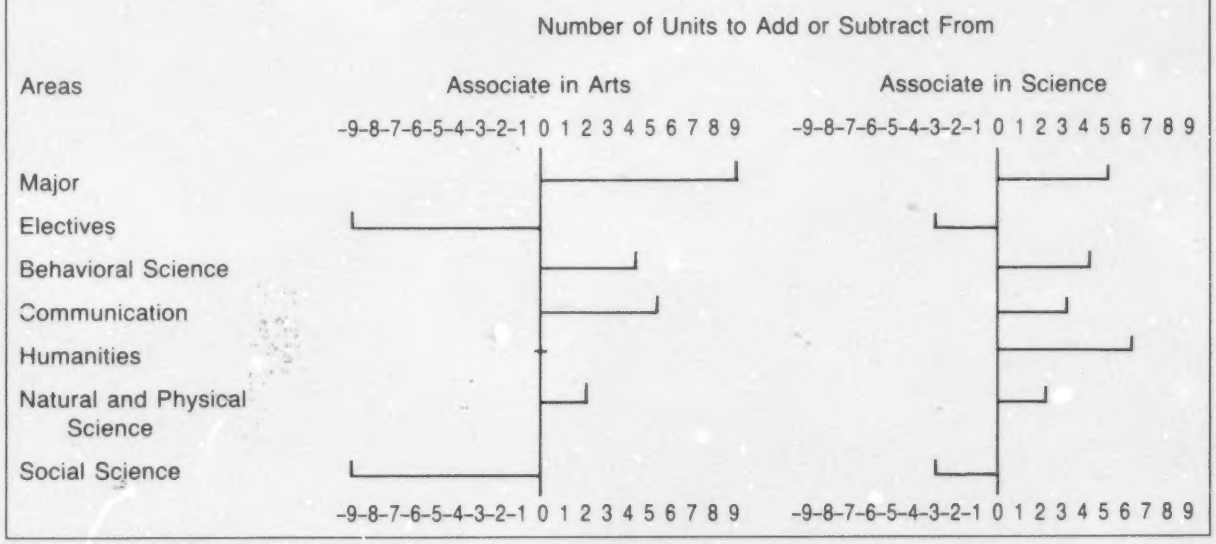
Table 3
Priorities of Competencies Perceived by Colleges and Businesses as Significant in the Development of an Associate Degree*

Competencies	Colleges' Current Priority Rank	Colleges' Suggested Priority Rank	Businesses' Suggested Priority Rank
To instill the ability to acquire and actualize knowledge.	2	1	1
To facilitate the mastery of communication skills.	3	2	3
To promote the appreciation of one's own cultural heritage and that of others.	7	5	6
To infuse the ability to collectively, as opposed to individually, pursue the analysis and solution of problems.	5	6	4
To stimulate the awareness and to develop the concern for contemporary events, issues, and problems.	6	7	7
To encourage the use of personal knowledge and experience to develop individually as a responsible member of society.	4	3	5
To develop career-related skills.	1	4	2

*A lower rank indicates higher priority.

Table 4

Respondent Colleges' Recommended Changes for the Associate in Arts and Associate in Science Degrees



Both the high schools and the business corporations sampled in the survey suggested that to rely on the prestige of the past accomplishments was just not practical. Only 8 percent of the business respondents recognized the prestige of the associate degree; 91 percent indicated that the most important significance of the degree was its impact on preparation for a career and its help in personal development. Sixteen percent identified the degree as an opportunity for intellectual development; the same percentage of respondents suggested that the degree was helpful in maintaining job security. Eight percent emphasized the degree's monetary value; and finally, 8 percent did not recognize any significance of the associate degree in the corporate world. On the other hand, 21 percent of the high school respondents recognized prestige in the associate degree; 41 percent, the intellectual development it entails; 62 percent, the personal development it offers; 55 percent, the monetary potential it suggests; 86 percent, the career preparation it represents; 41 percent, the job security it provides; and 10 percent, the good bargain it is.

Table 3 compares the actual degree competencies, as seen by community college respondents, with the "ideal" competencies, suggesting areas of possible change. It also includes a ranking of competencies as suggested by the respondent businesses.

An analysis of Table 4 indicates that there should be a greater increase of units under the major and communication in the associate in arts degree than in the associate in science degree; a greater reduction of units under electives and social science; and an equal amount of units under behavioral science. In the area of humanities there is no increment or reduction suggested for the associate in arts degree. However, an addition of six units is recommended for the associate in science

degree.

Reviewing the same question in the high school survey, we find the following recommendations: in terms of general education requirements, 47 percent of the responding high schools' spokespersons recommended an increase; 11 percent suggested a decrease; and 42 percent said there should be no change in the unit requirements. Eighty-one percent indicated a need for more units in the number of units required under a major, and 19 percent indicated there should be no change. Twenty-five percent suggested an increase in elective units, 6 percent recommended a decrease, and 69 percent indicated there should be no change.

Therefore, there is consistent agreement among colleges and high schools about the need for an increase in unit requirements under the major, but disagreement regarding changes in elective units, with high schools suggesting an increase and colleges recommending a reduction.

Suggestions received from businesses to improve the associate degree are shown in Table 5.

Table 5
Businesses' Recommendations for Change

Areas of Improvement	Mean Rank	Rank
More emphasis on the basic skills of reading, mathematics, and oral and written communications.	1.7	1
More emphasis on data processing and/or interpretation (computer technology).	2.8	3
More emphasis on training in the emerging fields of high technology.	2.3	2
More emphasis on specific job-related skills.	2.3	
More emphasis on solving the major problems in society.	5.0	5
More knowledge of environmental issues.	4.8	4

IV

OPINIONS, PLEASE

A Forum of Viewpoints

In light of the high degree of interest in issues such as general education, academic standards, and competencies among survey respondents, it is of benefit to review a forum of viewpoints from others knowledgeable about these and other aspects of the associate degree. Presented here are the opinions of state higher education officers, representatives of educational associations, professors of higher education, high school principals and counselors, and community college faculty and administrators who responded to the survey. Their comments indicate the diversity of opinion concerning the associate degree as it is and as it should be.

State higher education officers, association directors, and university professors noted that the associate degree indicated solid academic accomplishment and the acquisition of practical vocational skills. For example, David M. Otis, executive director of the Higher Education Planning Commission of the state of Vermont, said that the associate degree was "one of the great educational bargains of our time, particularly since a number of young people who earn the degree obtain good jobs with better pay and prospects in only two years than many graduates of four-year programs."

The degree provides a sense of immediate accomplishment for "many students who are not initially sure about their total educational goals and have, perhaps, a low academic self-image," said John B. Duff, chancellor of the Massachusetts Board of Regents of Higher Education. Duff noted that for many students their low self-image was improved by their success in the community colleges, adding that 40 percent of Massachusetts' associate degree holders immediately continued into baccalaureate programs.

For other students the degree offers "a legitimate point to 'get off the train,' " according to James L. Wattenbarger, director of the Institute of Higher Education at the University of Florida, who added that it was "viewed as a milestone in an individual's progress toward becoming an educated person." In agreement was R. Wayne Richey, executive secretary of the Iowa State Board of Regents, who noted that the recognition of the degree was "extremely important and beneficial to students," especially for those who found it accepted as completion of lower division work by four-year institutions. "An increasing number of successful applicants to professional schools begin their academic careers in [Kentucky's] community colleges, and then complete their preparation at a four-year institution," said Harry Snyder, executive director of the Kentucky Council on Higher Education. Two-year technical programs were also growing "and have been successful in meeting our manpower needs for trained technicians and semiprofessionals. Kentucky needs to intensify its efforts at this level."

According to Donald J. Nolan, deputy commissioner for higher and professional education of the New York State Education Department, trends are consistent with the rest of the country, with "an increasing proportion being granted in the technological areas rather than in the prebaccalaureate liberal arts and sciences."

James Wattenbarger pointed out that Florida's general education articulation agreement between two- and four-year institutions "constitutes a major building block in the systems' intrarelationships." Another state offering well-established articulation agreements between two- and four-year institutions is Iowa, in which the regent universities—the University of Iowa, Iowa State University, and the University of Northern Iowa—have established a transfer agreement with the area schools, which provides full recognition for the associate degree.

Gladys Meier, registrar of the University of Wisconsin's Center System, reported that six universities within the state's system and two private colleges in Wisconsin accepted the associate degree as meeting their basic studies, or liberal education, requirements. "This is a distinct advantage to students transferring to those schools for the bachelor's degree," she said. Edward Moulton, Chancellor of the Ohio Board of Regents, noted that the associate degree occupied a vital place among the various recognitions conferred by Ohio's colleges and universities, and the associate in arts "signals a student's preparedness to enter a bacca-

laureate program at the junior level."

Roy Carroll, vice president of planning for the University of North Carolina, wrote that in his state "the nature of the associate degree has been widely accepted and generally understood." The university places particular attention on transfer and articulation in regard to the degree, with a "Joint Committee on College Transfer Students, which is made up of representatives from the public senior institutions, from the public community colleges and technical institutes, and from the private junior and senior institutions, [which] issued guidelines for transfer and for interpretation and implementation of credit offered by transfer."

Voicing interest in the issue of degree standards was Jack Tebo, supervisor of the Florida Postsecondary Education Policy Unit. While the associate in science and associate in arts degrees were practical and useful, he said, the work done "should be of sufficient rigor to allow subsequent continuation of the pursuit of a higher level degree, should that be the choice of the recipient." Norma Foreman Glasgow, commissioner of the Connecticut Board of Higher Education, replied that "infusion of a liberal arts or general education component for the degree is of particular importance, to assure achievement of competencies in reading, writing (communication skills), mathematical concepts, and analytical skills."

Howard Boozer, executive director of the South Carolina Commission on Higher Education, wrote, "I hope that as your task force reevaluates and redefines the associate degree, it will make every effort to see that standards of quality are set that are meaningful." Richey also expressed support for the task force's plan to provide recommendations concerning competencies to be achieved as part of the degree program.

The importance of academic standards was stressed by Moulton, who wrote, "My concerns with the associate degree are the same concerns I have expressed regarding all other aspects of the academic enterprise. I believe the integrity of all our degrees and credits is under threat from a variety of sources. Cheap credits awarded for undocumented 'educational experiences' cheapen the degrees to which they are applied. Courses offered at locations remote from college facilities, by adjunct faculty having little or no contact with the full-time faculty of the sponsoring institution, raise serious questions as to the comparability of credits earned at such sites."

Richard L. Davison, associate commissioner for curriculum and research of the North Dakota State Board of Higher Education, questioned the "precise objectives" of the degree, noting that "it is poorly defined in our state and has little or no consistency from one institution to another." He said, "It is even difficult within an institution" to arrive at consensus. Citing lack of uniform standards was Snyder, who pointed out that "some institutions confer an associate degree whenever an individual has accumulated 60 to 65 hours of college work" whether or not a formal program was adhered to. "And, in the same vein," he said, "some institutions confer associate degrees in technical areas when no advanced work has been completed at the college level."

John Roueche, director of the Program in Community College Education at the University of Texas at Austin, said that there was great cause for concern over quality and excellence in community college degree programs. Basing his remarks on the results of two national studies the center had just completed, Roueche said that community colleges "have lost the qualitative aspects of our offerings—and especially so in the associate degree/humanities area." Citing results that indicated a lack of reading and writing assignments in degree programs, he said, "Students do more reading and writing—and at higher quality levels—in technical programs than can be found anyplace in the humanities division." Also sounding a warning was Mark Curtis, president of the Association of American Colleges, who mentioned the danger of "allowing various outside pressures, and perhaps personal predilections, to divert...attention from [the] basic responsibility" of making "equal educational opportunities meaningful."

William Blow, of the Alabama Commission on Higher Education, said he was "somewhat concerned that the associate degree titles will proliferate to the same

extent that baccalaureate and graduate degrees have," and he suggested it might be worthwhile to designate all vocational/career—that is, nontransferring—programs by a single degree title, such as associate in applied science. Concurring was Howard Boozer, who wrote, "We are concerned over the proliferation of degree titles—e.g., associate in agriculture, associate in health science, associate in industrial technology, associate in occupational technology—which have replaced the associate in applied science as the degree title most commonly used for programs of a technical or vocational nature."

Blow also remarked that there was "a great deal of concern as to what type of institution should offer the associate degree," explaining that "in Alabama, junior/community colleges, postsecondary technical institutes, and some universities offer such degrees." In Kansas there are "a limited number of two-year associate degree programs at the state universities," according to Stanley Z. Koplik, executive director of the state's Board of Regents. "That Board has adopted the policy of approving two-year programs at our four-year institutions only when our institutions have a unique strength in areas not otherwise available through established two-year programs."

The tendency to relate the associate degree to second-class status must be due to the fact that the degree is awarded primarily by community colleges, said Alexander Astin of the Higher Education Research Institute at the University of California, Los Angeles. He suggests that having four year institutions award the same degree to their undergraduates after they complete an appropriate array of undergraduate courses "would help immensely to relieve this problem."

Also advocating the awarding of associate degrees by four-year institutions was Allan Ostar, president of the American Association of State Colleges and Universities, who said that such a practice would be "highly desirable and educationally sound." This practice, he said, would encourage greater flexibility, facilitate transfer from one institution to another, permit exit and reentry without loss of credit, focus attention to the career ladder concept in curriculum development, and give greater legitimacy to the associate degree in postsecondary education.

There are three main values for those who earn the associate degree, according to responses from high school counselors and principals: job training and certification, preparation for transfer to a four-year institution, and personal satisfaction.

The counselor from Bennett High School in Buffalo, New York, said recommendations to students concerning the degree focused on "university parallel programs and [preparation for] careers." Community college associate degree programs were "highly desirable in some career fields," said the spokesperson for Madison High School in Madison, Wisconsin. Also stressing the job preparation aspect was the counselor from Bowling Green High School in Bowling Green, Kentucky, who said the degree "is designed to allow the student entry in the job market with a concentrated area of study in a specific job area."

The principal of Washington High School in Kansas City, Kansas, said, "The associate degree curriculum has been expanded and is being expanded each year to fit the needs of the community and its vast diversification. As the community changes, so does the community college. Emphasis is placed on job opportunities. Keeping up with new training and technology and development of new skills for job changes are stressed."

Students who transfer to the University of Hawaii from local community colleges usually spent three—instead of two—years earning the associate degree, said the counselor from Kalaheo High School in Kaulua, Hawaii. "We assure students that his is not necessarily a handicap, since the transfer students from the local community college have a better record in grade point average for the last two years than does the entire school upperclassmen population."

In summary, high school principals and counselors see value in the associate degree in terms of job training and academic preparation for transfer to a four-year institution. On the other hand, community college administrators and faculty commented on a large vari-

ety of issues relating to the associate degree.

Gwendolyn W. Stephenson, vice chancellor for planning and academic affairs at St. Louis Community College, Missouri, said, "The associate degree, as it exists today, is probably one of the most effective ways of addressing the needs of U.S. citizens for skills training and upgrading, especially in high technology, and it also provides a low-cost way for students to acquire the first two years of a baccalaureate degree."

Donna D. Briggs, of Massasoit Community College, Massachusetts, said, "The associate degree answers the need in society for two-year level degree options as well as for the corresponding content areas and levels of learning. Associate degree holders in Washington found the degree "a very good basis" for general education and "meeting the first two-year requirements of most four-year institutions. It allows students to transfer at junior standing," said Jefferson E. Overholser of Spokane Community College.

Elmo Roesler, director of planning and evaluation of instructional programs and student services for the Virginia Community College System, said, "The occupational/technical emphasis at the associate degree level assures students that skills learned in these programs are job relevant and marketable." But R. Brightman, of Coast Community College District, California, replied that the degree, as it now stands, was "often too narrowly occupational."

Winston H. Lavallee, assistant dean of Holyoke Community College, Massachusetts, said the degree "often is as valuable in the occupational arena as a bachelor's degree. We note a number of bachelor's degree holders coming to us for training," he said, adding that, "unfortunately, both upper-level academia and some industries still subscribe to the belief that *any* bachelor's degree is superior to the associate degree."

Citing the need for competencies and standards for the associate degree was Ben W. Carr, Jr., vice chancellor of the University of Kentucky Community College System, who said, "Much review is occurring concerning competencies of graduates, general studies versus technical courses, articulation from below and upward, etc. The associate degree is here to stay, but many changes may occur over the next few years in how the degree is defined and earned." Another proponent of competencies was Anthony D. Calabro, president of Western Nevada Community College, who wrote that "the associate degree . . . should reflect specific competencies," which would "help give the degree a renewed credibility."

Citing the time limitations of the degree was Floyd Elkins of Cedar Valley College in Texas, who said that "students can only master so much in two years." Lack of definition between various associate degrees was cited as a disadvantage by H. Victor Baldi, vice president of instructional administrative affairs at Indiana Vocational Technical College. He prefers the title of associate in occupational studies "for most occupational programs in two-year colleges and would like to see greater acceptance for its use."

Citing the need for more general education was John F. Bancroft of San Bernardino Valley College in California, and Barry L. Mellinger of Mississippi Gulf Coast Junior College, who said he was "concerned that the integrity of the associate degree is threatened. For example, there appears to be little concern generally for retraining sufficient general education requirements for graduation and for awarding the degree for 'noncollegiate' vocational programs."

John Gazda, of Metropolitan Community Colleges in Missouri, said, "Radical changes in degree requirements instituted during the '60s and '70s to reflect the social change of the period have not served the community college well." Alfred M. Philips, president of Tulsa Junior College in Oklahoma, said the traditional associate degree requirements "should be updated in area specifications and course content to comply with the current demands."

What a rainbow of viewpoints! But they reflect a consensus that the ideal associate degree is based upon a curriculum combining the student's interests and abilities with a continuous choice of career goals and experiences—programs through which those career goals can be pursued.

V

Advancing the Associate Degree

An Agenda for the Future

"When allowances are made for the large number of part-time students, the higher risks involved in the Open Door admission policy, and the large number of students enrolled in less than two-year programs, the statistical data on degrees are encouraging to those *who favor their award*" (emphasis added).[27] John Lombardi made this observation in 1980 at the conclusion of his excellent study "What's Happened to the Associate Degree?"

Interestingly enough, a growing number of universities and liberal arts colleges offer an associate degree certifying the successful completion of various programs obtained in the first two years. In the United States more than 50,000 associate degrees are awarded annually in institutions other than community, technical, and junior colleges.

There are suggestions from the American higher education community that "it would be desirable to require the associate's degree be granted everyone pursuing a bachelor's degree.... If such a recommendation were accepted, institutions might make the first two years of college radically different from the second two years; the danger could be minimized through institutional action."[28]

The proliferation of the associate degree in other than two-year colleges is of serious concern to all "who favor their award." This is a "happy problem" because it underlines the relative success of the associate degree in the American community, technical, and junior colleges.

On the other side of the issue is the birth of new associate degree programs of a four-year nature. For example, Kern Community College District in California, in cooperation with the Kern High School District, is proposing a four-year degree program. It would begin with the eleventh grade and conclude after two years of study in the community college. James C. Young, chancellor of Kern Community College District, commented, "By working closely with the high schools, the magic line would not be drawn between grade 12 and grade 13!"

State higher education officers in particular are concerned about the proper interpretation of the associate degree, which reflects a significant shift in policymaking from local colleges to state agencies. Gerald Hayward, chancellor of the California Community Colleges, recently appointed a statewide Task Force on Academic Quality. This group will study and make recommendations on a number of issues vital to the community colleges, including criteria appropriate for the associate degree as well as the need for student assessment and advisement. The faculty and administration of the Los Angeles Community College District just developed a new associate degree program with a strong competency base requiring testing in reading, written expression, and mathematics.

This report by the Task Force for the Redefinition of the Associate Degree examined the heart of the community college mission and found that the associate degree was alive and well. The survey itself and comments from professionals from the field raise a number of issues relevant to the present status of the degree with potential consequences for the future.

FIRST of all, while the associate degree is enjoying popularity, it is in need of further review and experimentation, particularly in areas such as high technology, data processing and interpretation, and applied mathematics.

SECOND, the traditional prestige of the associate degree is not among its strongest advantages. The degree is more appreciated in career preparation and personal development, especially by those students who need a sense of immediate accomplishment.

THIRD, the survey indicated that the degree's monetary potential and job insurance were not witnessed by the participating companies.

FOURTH, there is such a variation in subject area and unit requirements that universities and colleges prefer their own transfer requirements rather than accept the associate degree as qualifying students for

transfer.

FIFTH, high technology is not only affecting the curriculum but is precipitating an institutional metamorphosis. In many instances the colleges' refusal to acknowledge this phenomenon could result in deterioration of preparation for careers in technical areas.

SIXTH, colleges and businesses agreed that acquisition and actualization of knowledge and the mastering of communication skills were of very high priority. Special attention was given to the need for more emphasis on basic skills, data processing and interpretation, special job-related skills, and high-technology training.

SEVENTH, all sectors surveyed favored more attention to competency. It was suggested that colleges should work with business and industry to identify needed competencies. The competency-based associate degree, with testing throughout the program from entry to graduation, would enhance the graduate's success in careers in which standards are recognized as predetermining factors in the preparation itself.

EIGHTH, honors programs are offered in only 28 percent of the polled colleges, and the differences between standard and honors courses suggest quality variation.

NINTH, the associate degree definition is fragmented or nonexistent in most of the surveyed colleges.

TENTH, in terms of required change, more than half of the respondent colleges said that they would like to see more vigor in educational offerings, particularly in terms of general education, as well as more structure in curriculum with more coursework and more specificity in degree designation. The colleges also indicated the need for much better articulation with four-year institutions.

The greatest need identified in the survey is the development of a larger variety of high-technology programs as a response to society's needs. Seventy-one percent of the respondents indicated that high technology had already influenced their curriculum and that new programs should be developed.

The National Science Foundation, in one of its "think papers," introduced new educational alternatives for support technology. The Foundation paper stressed the need for technology as an integral part of education. The reference was also made to the use of cognitive skills in nonacademic settings, which is so important in the associate of applied science degree.

Dale Parnell, president of the American Association of Community and Junior Colleges, advocates a new degree "which would be characterized as a 'liberal technical' degree." He says, "There are some great underlying commonalities of knowledge, skills, and understanding that support the world of technology, i.e., design, control systems, electronic systems, fluid power systems, mathematics, science, and literary."

The synthesis of findings indicates that the associate degree would be more highly valued with certain modifications in the way it is defined and conferred. The first recommendations are directed toward strengthening the quality of the associate degree in order to improve its relevance and value to the student, the employer, and the four-year institution to which the degree holder may wish to transfer. It is clear that associate degree coursework can be neither relevant nor valuable to the student if it is outside the realm of his or her abilities. The development of mandatory testing, along with guidance to developmental courses for those demonstrating a need for such assistance, is therefore recommended as a basis upon which all other improvements can be built.

Next, it is recommended that competency standards be developed for all students seeking the associate degree. They should reflect consistently high standards, with progress from one level of the program to another monitored in terms of carefully evaluated performance. Testing throughout the degree program would ensure that high standards are reached and maintained.

The quality of the degree depends, more than anything else, upon the excellence of the faculty. It is recommended that a new liaison be established with the universities to improve the quality of our existing teaching corps and to develop a preteaching program

to suitably equip those instructors who will be coming to community colleges in the future. In vocational education programs maintenance of faculty quality should also involve development of opportunities for faculty to return to business and industry on a predetermined time schedule to sharpen and update their skills and expertise. Professional development for faculty in their own subject area is also recommended, along with fostering appropriate methodology to equip faculty to teach effectively in a highly heterogeneous classroom environment.

Improvement of the associate degree as an educational credential will also require recognition by vocational program instructors of the importance of liberal learning, as well as require the participation by all faculty in establishing and maintaining consistently higher standards.

Colleges must also move from a climate of student self-advisement to a carefully planned and executed counseling process, with the emphasis placed on successful transition to the workplace or a four-year institution. It is also recommended that counseling and advisement be enhanced with the appropriate technology, including use of computer programs providing information on opportunities and requirements within specific employment categories.

Recommended, too, is the establishment of associate degree committees at each college to work with faculty, students, four-year institutions, as well as business, industry, and labor groups. Activities could focus on such issues as counseling, orientation, matriculation, and collaborative efforts.

Improved relationships with business, industry, and labor could produce a wide range of benefits to all those involved, including regular review of coursework to ensure relevancy, development of opportunities for student work-study programs, and the previously mentioned opportunities for vocational faculty to return periodically to a business setting. In addition, business and industry should recommend competency standards for prospective employees. They should also be encouraged to recognize the associate degree as an indicator of successful achievement and demonstrable skills.

Business and industry involvement would also be most beneficial in the development of a new type of associate degree to meet the needs of a technologically oriented society, which is also strongly indicated by the results of this study. An appropriate designation for such a degree would be *associate in high technology*, and its specifications should be designed after careful consultation with business and industry to ensure recognition of, and appreciation for, the skills and competencies of its bearer. This degree could incorporate elements of both liberal and technical education, recognizing society's need for individuals with background in both areas.

Recommended as well are efforts to attract the support of national and local foundations for studies and projects in two specific areas: first, in the use of community, technical, and junior colleges as a national resource in advancing the world of work and the world of ongoing education; and second, in the development of cooperative efforts between universities, community colleges, and high schools to serve a given geographical area. (The Kern Community College District project referred to earlier in this chapter is an example of this kind of cooperation.)

Also recommended is further study of the associate degree, with primary emphasis on development of specific competencies in the award of the associate degree as well as appropriate secondary school preparation for those who intend to pursue it. Continued attention and emphasis are crucial because the revitalization of the associate degree will only be accomplished if bold steps are taken to achieve necessary change.

America's community, technical, and junior colleges are dedicated to helping all the members of our communities reach their personal and professional potential. And society is now calling upon us to continue in this path with even greater effectiveness. It is a challenge we cannot ignore.

APPENDICES

APPENDIX A

National Task Force for the Redefinition of the Associate Degree

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APPENDIX B

Respondents to College Survey

Atlanta Junior College
Bakersfield College
Brookdale Community College
Catonsville Community College
Cedar Valley College
Central Piedmont Community College
Cerro Coso Community College
City Colleges of Chicago
Coast Community College District
  Coastline Community College
  Golden West Community College
  Orange Coast Community College
College of Alameda
College of Southern Idaho
Community College of Denver
Cuyahoga Community College District
Dallas County Community College District
Delta College
Des Moines Community College
East Los Angeles College
El Centro College
Foothill-DeAnza Community College District
  DeAnza College
  Foothill College
Hawaii, University of
Indiana Vocational Technical College
Johnson County Community College
Kentucky, University of
Lane Community College
Long Beach Community College District
Los Angeles City College
Los Angeles Harbor College
Los Angeles Mission College
Los Angeles Pierce College
Los Angeles Southwest College
Los Angeles Trade-Technical College
Los Angeles Valley College
Los Rios Community College District
  American River College
  Consumnes River College
  Sacramento City College
Maricopa Community Colleges
  Glendale Community College
  Maricopa Technical Community College
  Mesa Community College
  Phoenix College
  Rio Salado Community College
  Scottsdale Community College
  South Mountain Community College
Massachusetts Board of Regents
  Cape Cod Community College
  Greenfield Community College
  Massachusetts Bay Community College
  Massasoit Community College
  Quinsigamond Community College
Merritt College
Metropolitan Community Colleges of Kansas City
Miami-Dade Community College
Minnesota Community Colleges
Mississippi Gulf Coast Junior College
Montgomery College
Nevada, University System Administration
  Truckee Meadows Community College
New Mexico State University
New York, State University of
North Idaho College
Oakland Community College
Peralta Community College District
Porterville College
San Bernardino Valley College
  Crafton Hills College
San Francisco Community College District
Santa Fe Community College
Sinclair Community College
St. Louis Community College Administrative Center
  St. Louis Community College at Florissant Valley
  St. Louis Community College at Forest Park
  St. Louis Community College at Meramec
Tulsa Junior College
Utah Higher Education, System Office
Virginia Community College System
Washington State Community College District
  Spokane Community College
  Spokane Falls Community College
West Los Angeles College
Wisconsin, University of

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